Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A process for forming a multilayer three-dimensional structure, comprising:

(a) forming a layer of at least one material on a substrate that may include one or more previously deposited layers of one or more materials;

(b) repeating the forming ~~operation of~~ "(a)" one or more times to form at least one subsequent layer on at least one previously formed layer to build up a three-dimensional structure from a plurality layers;

wherein the forming of at least one layer, comprises:

(1) supplying a substrate on which one or more successive depositions of one or more materials may have occurred;

(2) supplying a multi-cell mask, wherein each cell is separated from other cells by a material, wherein the cells of the mask comprise independently controllable electrodes, and wherein a pattern of dielectric material extends beyond the cell electrodes for contacting the substrate and for forming electrochemical process pockets when such contact is made;

(3) bringing the multi-cell mask and the substrate into contact such that electrochemical process pockets are formed having a desired registration with respect to any previous depositions and providing a desired electrolyte solution such that the solution is provided within the electrochemical process pockets; and

(4) applying a desired electrical activation to at least one desired cell electrode, to the substrate, and to any other desired electrode or electrodes, such that a desired material is selectively deposited onto the substrate.

Claim 2 (original): The process of claim 1 wherein there is no other desired electrode or electrodes that are to be activated.

Claim 3 (original): The process of claim 1 wherein at least a portion of the dielectric material that extends beyond the cell electrodes comprises a conformable material.

Claim 4 (original): The process of claim 1 wherein the applying results in electroplating of the desired material on to the substrate.

Claim 5 (currently amended): The process of claim 1 wherein the formation of the three-dimensional structure comprises at least the deposition of two different materials during the formation of at least a portion of each of the plurality of layers.

Claim 6 (original): The process of claim 1 wherein a plurality of the cells of the multi-cell mask comprise an electrodepositable material that may be deposited during the applying operation.

Claim 7(currently amended): The process of claim 1 wherein ~~the formation of a desired pattern of material on a given layer comprises~~ a plurality of selective depositions ~~operations~~ using the multi-cell mask are performed during formation of a desired pattern of material on a given layer and wherein at least a portion of the plurality of selective depositions utilize a cell whose potential deposition positions are ~~is~~ offset between at least two of the plurality of selective depositions ~~operations~~.

Claim 8 (currently amended): The process of claim 7 wherein at least a portion of the offsets of a cell result in locating the cell to a potential deposition position that partially overlaps a previous deposition position associated with a previous registration of the cell.

Claim 9 (currently amended): The process of claim 7 wherein the cell is made active when located at a portion of potential ~~its~~ deposition positions and is made inactive when located at a different portion of potential ~~its~~ deposition positions during formation of ~~on~~ a given layer.

Claim 10 (currently amended): The process of claim 9 wherein a resolution achieved in forming the given ~~of a~~ layer is better than that of a net area defined by the potential deposition positions ~~locations~~ at which a given cell is positioned during the formation of the given ~~a~~ layer.

Claim 11 (currently amended): The process of claim 7 wherein the cell is made either inactive ~~or active~~ when located at each potential deposition position to which it is ~~located~~ positioned during deposition of a given material during formation of a given layer or is made active when positioned at each potential deposition position to which it is positioned during deposition of a given material during formation of a given layer.

Claim 12 (currently amended): The process of claim 11 wherein a resolution achieved in forming ~~of~~ the given ~~a~~ layer is substantially defined by a net area defined by the ~~locations~~ potential deposition positioins at which a given cell is positioned during the formation of the given ~~a~~ layer.

Claim 13 (currently amended): The process of claim 7 wherein at least a portion of the offsets of a cell result in locating the cell to a potential deposition position that is substantially in registration with a potential deposition position from a previous registration of the cell on the given layer.

Claim 14 (currently amended): The process of claim 7 wherein at least a portion of the offsets of a cell result in locating the cell to a potential deposition position that does not substantially overlap a potential deposition position from a previous registration of the cell on the given layer.

Claim 15 (original): The process of claim 1 wherein the multi-cell mask comprises a plurality of rectangular cells laid out in a rectangular grid.

Claim 16 (original): The process of claim 15 wherein the rectangular cells are square.

Claim 17 (currently amended): The ~~electrochemical fabrication~~ process of claim 1 wherein, the operation of at least a portion of the cells of the multi-cell mask is tested by electroplating material using the mask and examining the resulting depositions.

Claim 18 (currently amended): The ~~electrochemical fabrication~~ process of claim 17 wherein any cells found to be faulty are labeled and the use of any faulty cells is avoided.

Claim 19 (currently amended): The ~~electrochemical fabrication~~ process of claim 6 wherein deposition from cells is tracked.

Claim 20 (currently amended): The ~~electrochemical fabrication~~ process of claim 6 wherein at least are portion of the cells are redressed by replenishing their ~~electrodeposition~~ electrodepositable material.

Claim 21 (currently amended): The ~~electrochemical fabrication~~ process of claim 20 wherein any ~~electrochemical~~ electrodepositable ~~deposition~~ material remaining in cells to be redressed is removed prior to ~~replenishment~~ replenishing of the ~~electrodeposition~~ electrodepositable material.

Claim 22 (currently amended): The ~~electrochemical fabrication~~ process of claim 7 where a planarization process occurs between at least two offsets and prior to a total deposition thickness reaching a desired deposition thickness for the layer.

Claim 23 (original): A process for modifying a substrate, comprising:

(a) supplying a substrate on which one or more successive depositions of one or more materials may have occurred;

(b) supplying a multi-cell mask, wherein each cell is separated from other cells by a material, wherein the cells of the mask comprise independently controllable electrodes, and wherein a pattern of dielectric material extends beyond the cell electrodes for contacting the substrate and for forming electrochemical process pockets when such contact is made;

(c) bringing the multi-cell mask and the substrate into contact such that electrochemical process pockets are formed having a desired registration with respect to any previous depositions and providing a desired electrolyte solution such that the solution is provided within the electrochemical process pockets; and

(d) applying a desired electrical activation to at least one desired cell electrode, to the substrate, and to any other desired electrode or electrodes, such that a desired material is selectively deposited onto the substrate.

Claim 24 (original): The process of claim 23 wherein there is no other desired electrode or electrodes.

Claims 25 - 29 (canceled).